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Determinants of Competitiveness of Small Enterprises: Polish Perspective

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Abstract

Small enterprises play a major role in small and medium sized enterprises (SMEs) sector, which play a decisive role in economic development and economic condition of countries. For example, in the European Union, SMEs contribute to over 99% of all enterprises and more than 100 million jobs, representing 67% of private sector employment. The paper uses the results of two direct studies of small and medium sized enterprises conducted in 2006-7 and 2013. The aim of this paper is to point out and discuss the competitiveness determinants in polish small companies.

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1. Introduction

Exploring the decision-making mechanisms of micro, small and medium enterprises (MSMEs) is one of the key areas of economic research. MSMEs, which constitute over 90% of enterprises in all countries, are an important source of manufacturing and employment. They employ 33% of workers in low-income countries and 62% of workers in high-income countries (Vandenberg 2009, p.8). In Poland, the importance of this sector is even greater. MSMEs constitute over 99 percent of the total number of entities (94 percent of them are micro entities) and participate in the creation of more than 46 percent of gross domestic product (the largest share of this group are micro entities, which in 2008 formed 29.8 percent of GDP) (GUS 2011, p.36; PARP 2010.). At the same time they belong to a group of

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companies particularly sensitive to changes in market environment. Small and medium-sized enterprises represent the most numerous group among economic operators and thus they play a significant role in the economy. They also exert major impact upon the development of individual geographic areas.

The paper presents a discussion of competitiveness determinants in Polish small companies. Dynamic changes in business environment in recent years led the authors to observe the changes occurring in the approach these companies to creation competitive advantage. The paper provides a summary of results of two direct studies in Polish small companies in 2006-7 and 2013.

The study focused on an analysis of company activities in the field competitive in the organization. The study was conducted using a mixed survey-monographic method. During the study obtained qualitative data. The main research technique was use of the questionnaires. The paper attempts to evaluate factors determining competitive advantages of operators based in the Silesia and Malopolska region.

2. Determinants of competitive advantage - some theoretical remarks

The interpretation of competitive advantage is affected by many aspects and may depend on the subject, point of view and objectives for which it has been defined. As a result, it can apply to enterprises, products, markets, entire sectors and countries in which the companies operate.

As noted by M. Piatkowski (2012) the term competitiveness does not have a uniform definition in literature. No one generalized definition of this issue is related to the fact that the theory of competitiveness is constantly being developed.

However, as highlighted in “A Study on the Factors of Regional Competitiveness” (2004) at the firm level there exists a reasonably clear and straightforward understanding of the notion of competitiveness based on the capacity of firms to compete, to grow, and to be profitable. At this level, competitiveness resides in the ability of firms to consistently and profitably produce products that meet the requirements of an open market in terms of price, quality, etc. Any firm must meet these requirements if it is to remain in business, and the more competitive a firm relative to its rivals the greater will be its ability to gain market share. Conversely, uncompetitive firms will find their market share decline, and ultimately any firm that remains uncompetitive – unless it is provided by some ‘artificial’ support or protection – will go out of business.

Searching for the sources of concept with regard to the enterprise's competitiveness advantage, special attention should be paid to economic theory.

Competitiveness in economic theory approach is interpreted variously. Based on literature review we identified key determinants of competitiveness in the major schools of economic theory (tab. 1).

Table 1. Key competitive factors by selected economic theory.

Economic theory	Key competitive factors
Classical theory	Investment in capital (i.e. improved technology) enhances the division of labour (specialisation) and, hence, raises productivity.
	Trade (move from autarky to free trade) provides an engine for growth (static gains from trade).
Neoclassical theory	Trade (move from autarky to free trade) provide an engine for growth (static gains from trade).
Keynesian economic theory	Capital intensity Investment Government spending, such as investment in the public domain and subsidies/tax cuts for enterprises
Development economics	Move from agriculture to higher value added sectors Openness to trade Foreign direct investment (FDI) (Foreign) development funds
New economic growth theory - endogenous growth theory	R&D expenditure Innovativeness (patents) Education level Spending on investment in human capital (schooling, training) Effective dissemination of knowledge (knowledge centres)
New trade theory	Factors influencing ‘first mover’ advantage, e.g.:

	Skilled labour Specialised infrastructure Networks of suppliers Localised technologies

Source: own study based on: A Study on the Factors of Regional Competitiveness (2004)

Small and medium enterprises (SMEs) play an increasingly important for market growth domestically and abroad, driving sustainable growth in the trading, production and service sectors through attracting investments. SMEs also play an important role in maintaining a healthy balance in the economy and are main job creators in society. Therefore, to identify the factors that determine their competitiveness is an important area.

Companies build their competitive advantage and competitiveness in different ways, regardless of whether they manufacture goods or provide services. The majority of service providers, which make a quite unique group of companies typical of modern society, employ the traditional methods of obtaining and maintaining competitiveness (Lemańska. Tomski, 2014).

For example, according Algis Zvirblis and Antanas Buracas study „Backgrounds of Aggregated Assessment of SMEs Competitive Advantage Determinants" distinguishes 8 determinants of competitiveness (the study concerned the Baltic countries: Lithuania, Latvia, Estonia). There are: capacity for innovation, extent of market dominance & sophistication, value chain breath, firm level technology absorptionm, production process sophistication, intensity of local competition and state of cluster development.

According M. Piatkowskia (2012), when determining the determinants of enterprise competitiveness, it is worth paying attention to its two-lane relation. On the one hand, it is the result of variable environment, on which the enterprise does not usually have influence and mechanisms with different time section; on the other hand, it depends on the decisions taken inside the company. The role of the owner (especially in SMEs) is to undertake actions which, resulting from the strategies and long-term plans, are aimed at strengthening the company's competitive position. Additionally in the process of creating and developing the enterprise's competitiveness potential we may speak about its beginning but its end should never take place.

The basic objective of our research concerning the enterprise's competitiveness is to indicate the factors and mechanisms of action which affect competitiveness and determine its achievement and maintenance. They have been presented in the empirical part of this article on the basis of conducted research.

As emphasized in academic literature, a key role in building a competitive edge is played by innovation. Studies on the behavior of SMEs indicate that innovation helps such enterprises effectively create their competitive advantage. This is due to their superiority to large companies in terms of higher flexibility, greater ability to respond to market changes (Stock et al. 2002), reduced red-tape in R&D management (Gilder 1988) and no conflict of interests on the owner-manager level (Hozer 2002). However, the innovativeness of such companies depends on both their innovation potential and the conditions in their immediate and distant environment. Of particular importance are external factors, as companies of this size, although they have many features conducive to the growth of innovation (like high flexibility and reduced bureaucracy), have limited resources, which often makes them unable to independently translate their ideas into practical implementations. Unfortunately (as shown by the research conducted by M. Sipa in 2012), only a few small and medium-sized enterprises can use their innovative potential in a sustainable way for a long period of time and in a sufficiently competitive way.

The source literature mentions different approaches companies take to innovation and building competitive advantage. Innovation is typically discussed in the context of large enterprises, since they have more capabilities to gather technological knowledge and resources, and also have greater freedom to enter new markets, which in turn enables them to make better use of unexpected innovations. Innovation makes a company able to survive and succeed both "now" and in the future (Koc 2007). Innovation also means "(...) an ability to allocate resources in an efficient way in order to shape optimal configuration of competitive advantages" (Bielski 2000). It is an outcome of a mutual penetration (interaction) of R&D, market, and production (Janasz 2002). In the case of SMEs, their financial resources might be a key factor of their innovation. Most of them, however, do not have sufficient means to develop innovative solutions. Additionally, they have great difficulty in obtaining external funding (unlike large companies). As a result, they are "forced" to cooperate with other entities, public institutions, and R&D centers in order to implement and share their innovation (OSLO 2005). Assuming that these companies are more flexible and therefore can better adapt to emerging market changes, they should be expected to be more capable of creating innovation and building their competitive advantage (Stock 2002). The innovation of small businesses is interpreted as the willingness of their owners to explore innovation and incorporate it both from internal and external market (Verbees 2004, Tomski 2014). It is small firms that are forced to make more efficient use of their means of production and workforce as well as to constantly seek new technical and organizational solutions. According to G. Gilder, the innovative advantage of such entities should derive from their greater ability to adapt to market changes and to avoid "bureaucratic limbo” (Gilder 1988).

Changeability of the sector of small and medium-sized enterprises requires that it should be constantly analized (Okręglicka 2015). In addition Gorzeń-Mitka (2013) indicates to the need for continuous improvement of this group of companies. She indicates a group of assumptions that should constitute a model of an enterprise management in accordance with the paradigm of improvement. Small and medium-sized enterprises were particularly affected by the shifts in the economic milieu which stemmed from the financial crunch of 2008. In the authors' opinion, the crisis might have transformed their attitudes towards innovation and ways to build their market competitiveness. Hence, the research objective is to identify the factors that shape the competitive position of such companies in the context of two studies (study I – 2006-2007 – before the crisis, and study II – 2013). Details of the studies and their results are presented further in this article. .

3. Characteristics of study area

The Provinces of Małopolska and Silesia form the Southern Region, one of the six regions in Poland. Their total area amounts to more than 27.5 thousand sq. It is 8,79% of the total area of Poland. The two Provinces have the highest population density in the entire country, with Silesia being more densely populated than Małopolska by as many as 154 people per sq km. Poland’s population density is 123/km2. Moreover, gross domestic product (GDP) per capita in this region is one of the highest in the country and topped only by the Provinces of Łódź and Mazovia. In Silesia, GDP per capita is higher than in Małopolska by 20.1%. There are numerous business entities operating within these two Provinces. In terms of the number of small-sized enterprises, Silesia ranks second (right behind the Mazovia Province), while Małopolska ranks fourth (behind the Wielkopolska Province). Nearly 20% of all Polish small-sized enterprises is based in the Southern Region. This figure is more than 456,000 and more than 348,000 for Silesia and Małopolska, respectively. Detailed figures are presented in Table 2.

Table 2. Basic data on the surveyed provinces (2013 year).

	area [km^2]	GDP* per capita	population density [people/1km^2]	number of companies			
				small businesses			TOTAL
				0-9	10-49	TOTAL	
Małopolska	15183	36961	221	335314	12989	348303	351074
Silesia	12333	44372	373	436932	19142	456074	460350
SOUTHERN REGION	27516	81333	594	772246	32131	804377	811424

* data 2012 year
Source: own study based on: www.stat.gov.pl

4. Method

The results presented below are only part of a more comprehensive research on innovation and competitiveness of small-sized enterprises. The conclusions are based on the results of two own studies. The studies comprised of questionnaires and were conducted at the turn of 2006 and 2007 in Silesian small-sized enterprises (Study I) and in the first quarter of 2013 in small companies in Małopolska (Study II). The criterion to be identified as a small-sized enterprise was based on the categorization adopted in the European Union – the number of employees.

In both studies, similar questionnaires were employed in order to investigate changes in the perception of the discussed issues. The questionnaire consisted of 36 open-ended, semi-open-ended and closed-ended dichotomous questions as well as rating scales. The scales used in questions included nominal, ratio, and rank scales. The questions were grouped thematically into three sections: (a) market and competition, (b) innovative operations, and (c) cooperation with the environment. The questionnaire also included demographics. 216 (Study I) and 105 (Study II) complete and properly filled out questionnaires were approved for analysis.

5. Results

The results show that in both studies, the vast majority (almost 96% for Study I and more than 96% for Study II) of the researched enterprises was able to assess their competitive position[†], which proves their good market awareness. Half of the companies described their competitive position as very good or good (50.9%), while 40.3% of the companies claimed it was average.

Over the years, the number of companies which deemed their market position a good or very good slightly dropped to 46.7%. On the other hand, there was a noticeable change in the percentage of companies which evaluate their market position as poor (increase by 8.2%) and very poor (increase by 1.5%). On the scale from 1 to 5 (1 – very poor, 5 – very good), the average rating of market position was higher in the study of 2006/07, amounting to 4.2, while for study II it was 3.27. Detailed data are presented in Table 3.

Table 3. Market position ratings (%).

Market position	2006/07	2013
very good	3,7%	8,6%
good	47,2%	38,1%
average	40,3	35,2%
weak	3,2%	11,4%
very poor	1,4%	2,9%

Source: own study

The owners of the surveyed enterprises also described the competitiveness factors of their companies . These determinants were presented in three systems. The distribution of all answers was analyzed in detail, with particular attention paid to the most important ones. In each case, a comparative analysis was conducted, showing the changes that occurred over the years covered by the studies.

Given all the responses provided on this topic, emphasis should be put on certain changes in the frequency of some of the factors (Figure 1). In the case of survey conducted in 2013, significant changes can be seen for factors which ranked first. The most frequent factors include company image and product brand, which previously ranked fifth. They are followed by lower product price and focus on a specific group of customers, which were also in the top three in Study I and ranked first and third, respectively. Moreover, 2013 brought better results for such factors as introducing new products (6th position in Study I) and quick adaptation to market demands (11th position in Study I and the biggest progress). Factors ranked much lower in the second study compared to Study I include upgrading the existing technologies – previously it ranked fourth, but in 2013 it ranked thirteenth.

When analyzing the most crucial factors (answers with rank 1) shaping the competitive position of the companies that participated in both studies, there are significant changes in the ranking (Fig.2). In 2013, three most important determinants were the same as the ones with the highest number of responses among all the answers (without ranking). These include (a) company image, product brand; (b) lower product price, and (c) focus on a specific group of customers.

[†] Companies have evaluated their competitive position, describing it as very good, good, average, weak or very poor. Businesses can choose hesitant answer - it's hard to say

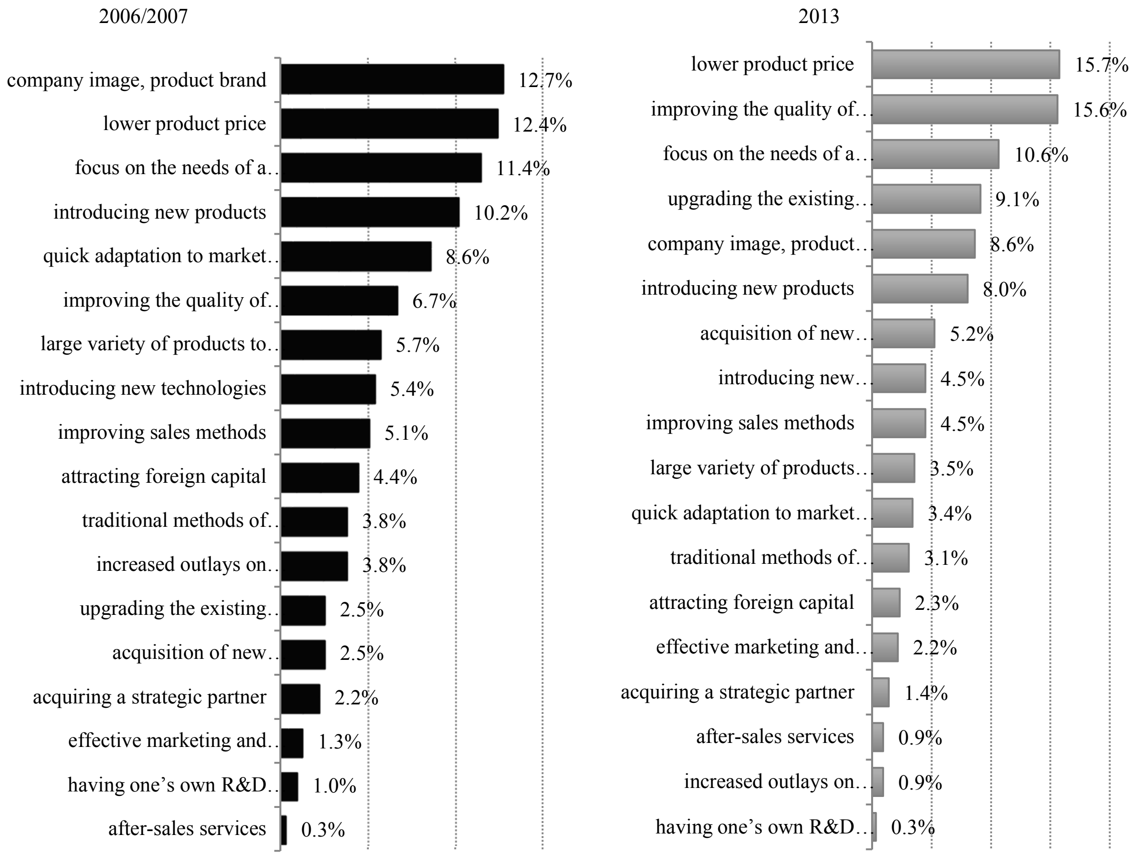

Fig.1. Summary of competitive position factors (distribution of answers)
Source: own elaboration.

In Study I, they were: improving the quality of products, upgrading the existing technologies and focus on a specific group of customers. It is clearly visible that only focus on a specific group of customers did not change its position in the top three most important factors. What is an interesting shift is company image and product brand moving to the top, having earned 171% responses with rank 1. Such a significant shift (position 7 in Study I) may indicate that these were companies that already have the established market position.

The changes in the most important factors indicate that entrepreneurs attach less importance to determinants related to innovative activities such as improving the quality of products and upgrading the existing technologies, which were ranked lower both in the general list and among the most important determinants (respectively, ranks 6 and 9 in Study II). Another alarming fact is that in Study II lower price was ranked that high among the key factors (14.3% responses with rank 1). Competing on the basis of low price gives only a short-term advantage, and therefore entrepreneurs should work on identifying their key competencies that will provide them with a more sustainable competitive edge on the market. However, these changes may be due to the difficult economic situation which occurred between the two studies.

It should also be noted that in the study conducted in 2013, the most important determinants did not include 'having one's own R&D facilities', although the result for this factor improved by 0.6% overall.

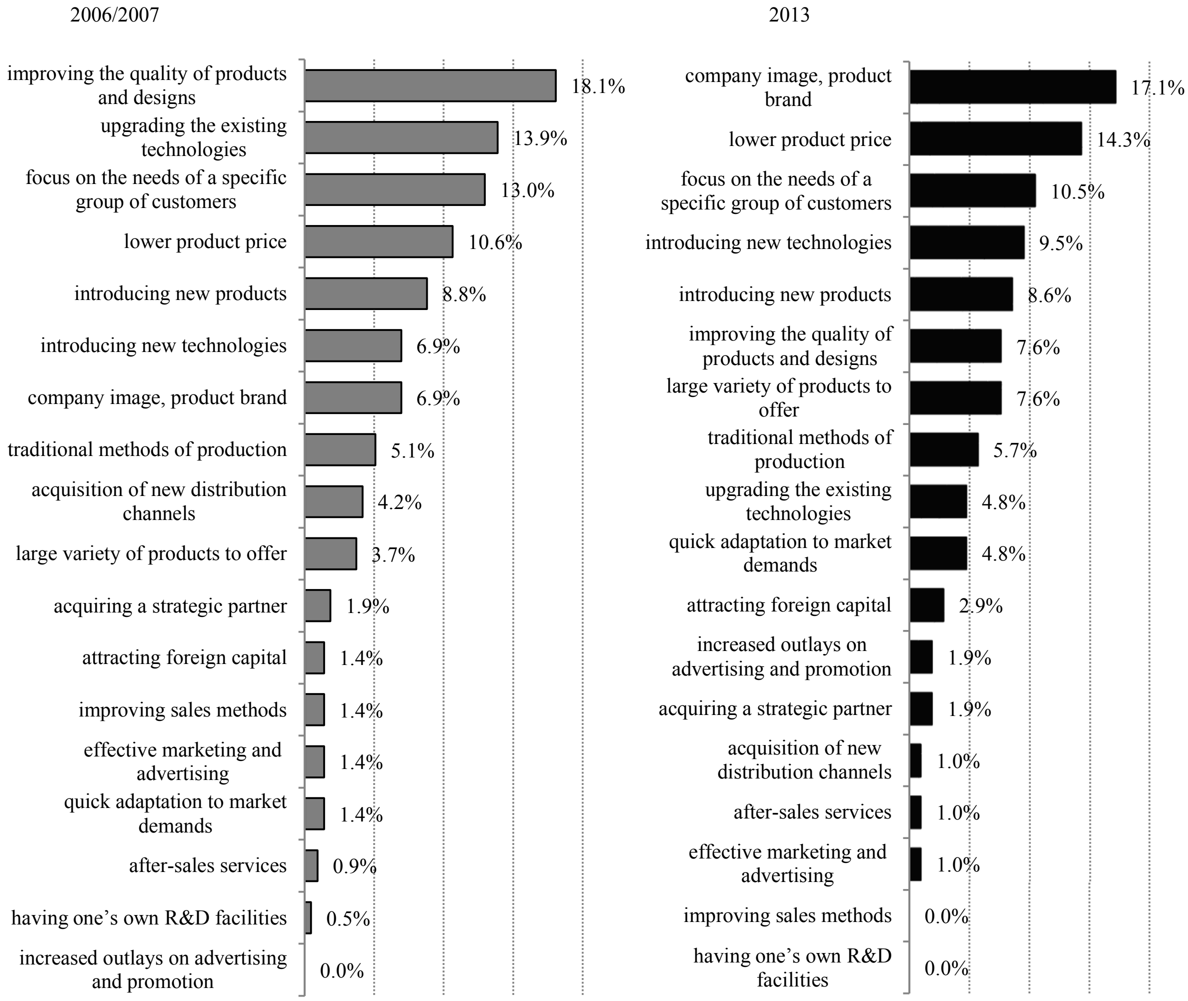

Fig.2. Key determinants shaping the competitive position of companies (rank 1 – the most important ones)
Source: own elaboration.

The differences between the percentage distribution of results for individual factors in Study I and II (see Table 2 for details) show that for all factors as well as for the most important ones, the largest drops were observed in the case of such factors as: improving the quality of products and designs (respectively: -8.9% and -10.4%) and upgrading the existing technologies (respectively: -6.6% - 9.1%). The third position is occupied by lower product price. As it turns out, for this factor a smaller percentage was recorded only in the case of all responses (decrease by 3.4%), while in the case of key factors there was an increase for lower price by 3.6%. in comparison with the 2006/2007 results. The change in this area is particularly alarming, because companies whose competitive strategy hinges on low price are able to gain only short-term advantage over competitors.

As can be concluded from the comparative analysis, increases are observed for such factors as: quick adaptation to market demands; increased outlays on advertising and promotion; a large variety of products to offer; traditional methods of production; introducing new products; attracting foreign capital; focus on the needs of a specific group of customers; having one's own R&D facilities and introducing new technologies; improving sales methods; company image; product brand; and acquiring a strategic partner. One positive aspect is that this group included factors which indicate that the companies undertake innovative activities: having one's own R&D facilities, introducing new products, and introducing new technologies.

Table 4. Percentage changes in the results for various determinants in comparison with the Study I results

	all factors	the most important factors
improving the quality of products and designs	-8,9%	-10,4%
upgrading the existing technologies	-6,6%	-9,1%
lower product price	-3,4%	3,6%
acquisition of new distribution channels	-2,7%	-3,2%
effective marketing and advertising	-0,9%	-0,4%
after-sales services	-0,6%	0,0%
improving sales methods	0,6%	-1,4%
having one's own R&D facilities	0,6%	-0,5%
traditional methods of production	0,7%	0,6%
focus on the needs of a specific group of customers	0,8%	-2,5%
acquiring a strategic partner	0,8%	0,1%
introducing new technologies	0,9%	2,6%
attracting foreign capital	2,1%	1,5%
introducing new products	2,1%	-0,2%
large variety of products to offer	2,2%	3,9%
increased outlays on advertising and promotion	2,9%	1,9%
company image, product brand	4,1%	10,2%
quick adaptation to market demands	5,2%	3,4%

Source: own elaboration.

However, these changes are not significant, especially in the case of R&D facilities and introducing new technologies, where the growth did not exceed single digits. Furthermore, there was a decline in the importance of achieving a competitive position – R&D facilities were not mentioned as the most important determinants.

The results for introducing new technologies in Study II were 0.9% in general and 2.6% among the most important factors. The result for introducing new products rose by 2.1% in comparison with the result obtained in Study I. Such distribution of answers may indicate that the companies are aware of the need for innovation despite the economic turbulence. In addition, it can be noted that more attention was focused on the introduction of new technologies than on upgrading the existing ones.

The most dramatic changes – by more than 4% – were observed for quick adaptation to market demands as well as company image and product brand. In the case of adaptation, it was an increase by more than 5%, while for brand and image – 4.1%. For these determinants, higher values were also recorded in the group of key factors: the result for quick adaptation to market demands rose by 3.4% compared to Study I, while the result for company image and product brand soared by more than 10%. These results might suggest that after a period of considerable market volatility related to the global economic crisis, it was flexibility – a feature typically associated with small-sized companies – that played a major role in shaping companies' competitive position on the market. Also, it seems that companies probably started to appreciate company image as a key determinant that guarantees a more sustainable market edge, regardless of ongoing market changes.

6. Conclusion

To small-sized enterprises, building a competitive advantage is undoubtedly a difficult task. Changes in the economic environment affect the way such entities perceive factors which could help them not only survive on the market but shape their competitiveness. As the studies show, in the period of significant economic turbulence, a major role in shaping the competitive market position was played by the following factors: company image (product brand) and lower product price. The market position of small businesses was also shaped by focusing on a specific group of customers. Small-sized enterprises started to appreciate their unique nature, which makes them able to quickly adapt to market demands.

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